REMARKS

Reconsideration and allowance of this application is respectfully requested. Claims 19-27 have been added. Claims 1-18 remain in this application and, as amended herein, are submitted for the Examiner's reconsideration.

Claims 1-18 have been amended to have the claims better conform to the requirements of U.S. practice. None of these amendments is intended to narrow the scope of any of these claims, and no new matter has been added by these amendments.

Claims 1, 7 and 13 are also further amended as described herein.

In the Office Action, the Examiner rejected claims 1-18 under 35 U.S.C. § 103(e) as being unpatentable over Zhang (U.S. Patent No. 6,181,711) in view of Huang (U.S. Patent No. 5,617,145). It is submitted, however, that the claims are patentably distinguishable over the references.

It is often desirable to record the video stream of a received digital television broadcast signal at a lower bit rate than that of the received signal. Existing systems, however, not only reduce the bit rate of the video stream but also reduce the bit rate of non-video streams, such as the audio stream, that have a lower data volume than the video stream which greatly degrades the quality of the non-video stream.

The present invention addresses this problem by controlling coding conditions for reencoding a first stream on the basis of a current bit rate of a second stream and a bit rate of an output multiplexed stream.

The Zhang patent is directed to bit rate conversion that matches the bit rate of a video stream to the capacity of a channel. Zhang shows, in Fig. 4, a bit rate conversion device which de-multiplexes pre-compressed digital video input into a video stream, an audio stream and a data stream and then parses the timing, programming and other information from the video

7

stream. Then, the video stream is decoded, the number of bits in the video stream is reduced, and the video stream is then encoded. The encoded video signal is then combined with the audio stream and the data stream. (See column 8, lines 58-62; and column 10, lines 3-67).

Though the Examiner acknowledges that Zhang fails to teach reencoding the first stream on the basis of a current bit rate of the second stream and a bit rate of the output multiplexed stream, the Examiner nevertheless contends that the Huang patent does. Huang is directed to providing a communication link between an audio encoder and a video encoder such that the bit savings obtained by the audio encoder is used by the video encoder. (See column 3, lines 15-19). The patent, however, describes that the number of bits available for the *current picture encoding* is determined by calculating the bits saved by the audio frames during the *previous picture encoding*, the bit amount used by the *previous picture* and the fullness of the FIFO buffer which contains the *previous picture*. The picture coding mode is then selected based on the number of bits available. Also, the bit usage of the *current picture* is used when encoding the *next picture*. (See Fig. 1; column 4, lines 1-33; and column 6, line 58 to column 7, line 12). Huang does not suggest calculating the number of bits available for the current picture coding using *current values* and thus does not suggest encoding a first stream on the basis of a *current bit rate* of a second stream. Claims 1, 7 and 13 have been further amended to show these differences.

Neither Zhang nor Huang suggests:

a controller operable to control coding conditions for reencoding said first stream on the basis of a current bit rate of said second stream and said bit rate of said output multiplexed stream

as recited in claim 1, and thus neither reference suggests:

a coding unit operable to reencode said first
stream under said coding conditions

as called for in claim 1.

It follows that neither Zhang, Huang nor their
combination suggests or contemplates the information processing
apparatus defined in claim 1, and claim 1 is patentably distinct
and unobvious over the references.

Claims 2-6 depend from claim 1 and each further
defines and limits the invention set out in the independent
claim. It follows that each of claims 2-6 likewise defines a
combination that is patentably distinct over the references.

Further regarding claims 2 and 3, neither Zhang nor
Huang suggests determining a bit rate difference between the bit
rate of an output multiplexed stream and the current bit rate of
a second stream.

Independent claim 7 is directed to a method for
reencoding an input multiplexed stream and includes limitations
similar to those set out in claim 1. It follows that claim 7 is
similarly distinguishable over Zhang and Huang.

Claims 8-12 depend from claim 7 and are
distinguishable over the references at least for the same
reasons. Claims 8 and 9 also include limitations similar to
those set out in claims 2 and 3 and for the same reasons are
further distinguishable over the references.

Independent claim 13 relates to a recording medium
with a computer readable program that includes limitations
similar to those set out in claim 1, and the claim is therefore
similarly distinguishable over Zhang and Huang.

Claims 14-18 depend from claim 13 and are similarly
distinguishable over the references. Additionally, claims 14
and 15 include limitations similar to those recited in claims 2
and 3 and are likewise further distinguishable over the art.

Accordingly, withdrawal of the rejection of claims 1-18 under 35 U.S.C. § 103 is respectfully requested.

New claims 19-21 depend from claim 1, new claims 22-24 depend from claim 7, and new claims 25-27 depend from claim 13, and each is distinguishable over the references at least for the same reasons. Support for claims 19-20, 22-23 and 25-26 is found in Figs. 1 and 13 and on pages 6-8 and 21-22 of the specification. Support for claims 21, 24 and 27 is found in Fig. 10 and on pages 17-18 of the specification.
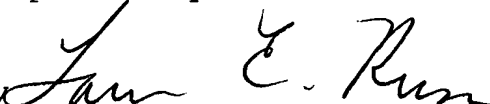
As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that the Examiner telephone applicant's attorney at (908) 654-5000 in order to overcome any additional objections which the Examiner might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

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